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EXAMINER	
DANG, KHANH	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,104	LAIHO, KIMMO	
	Examiner	Art Unit	
	Khanh Dang	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-10,12-14 and 17-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5,7-10,12-14 and 17-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Application Status

Applicants' RCE filed 12/03/2008 to continue prosecution of this application is acknowledged.

Claim Rejections - 35 USC § 112

Claims 1, 2, 4, 5, 7-10, 12-14, and 17-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amendments to claims 1 and 21, and the new claim 22 do not have proper support from the originally filed specification. Specifically, paragraphs [0028] and [0031] do not provide any support. Applicants disagree with the Examiner, Applicants are required to point out to the specification citing page and line number for support.

Paragraphs [0028] and [0031] are reproduced below.

> [0028] When subsequently the PC 10 is connected to the USB bus 13, the following occurs. As the PC 10 is connected, the voltage on V.sub.BUS rises as a result of the voltage supply 16. When the voltage on V.sub.BUS exceeds a threshold of 4.2 Volts, this is detected by the comparator 21, which sends IRQ active, to activate an interrupt. The USB host module 19 on detecting that IRQ has gone active takes a number of actions. Firstly, the USB host module 19 sends a reset command on the

D.sup.+ and D.sup.- lines 15, which causes resetting of the USB non-host module 17 of the mobile telephone 11. Secondly, the USB host module 19 causes the accessory device 12 to relinquish host status by going tri-state, that is by presenting a high impedance to each of the D.sup.+ and D.sup.- lines 115. The impedance is typically several megaohms, but is at least one megaohm. Lastly, the USB host module 19 sends CTRL inactive, in response to which the voltage supply 20 is controlled to cease providing a supply voltage for V.sub.BUS and to tri-state, i.e. present a high impedance to V.sub.BUS. As a result, the PC 10 is able to assume host status with the mobile telephone 11 whilst the accessory device 12 waits in a standby mode.

[0031] Referring now to FIG. 3, a mechanical arrangement for connection of the components of the FIG. 1 system is shown. The mobile telephone 11 includes a USB port 30, to which is connected a first and 31 of a first short USB cable 32. The other end 33 of the first USB cable 32 is plugged into a first USB port 34 forming part of the accessory device 12. Similarly, the PC 10 includes a USB port 35, in which is plugged a first end 36 of a second, longer USB cable 37. The other end 38 of the second cable 37 is plugged into a second USB port 39 of the accessory device 12. In the accessory device 12, connections of the first USB port 34 are connected by respective wires directly to corresponding connections of the second

USB port 39, allowing USB communication between the PC 10 and the mobile telephone 11 without involving the accessory device. In this example, the VBUS line is shown, and the other lines are grouped together as 40. The comparator 21, the voltage supply 20 and the USB host module 19 are connected to respective ones of VBUS and the other lines, as described above in relation to FIG. 1. Accordingly, when the PC 10 is not hosting the USB bus 13, the accessory device 12 can detect this and assume host status. In this example, the USB ports 30, 34, 38 and 35 each include a female connector, and the cable ends 31, 33, 38 and 36 each include a male connector. To prevent current being fed along V.sub.BUS towards the USB host 10, one of the cable end 38 and the second USB port 34 might include a suitably arranged diode (not shown) or other arrangement having a similar effect.

Claim Rejections - 35 USC § 112

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 is directed to an apparatus. However, the essential structural cooperative relationship(s) between the so-called “means for detecting the presence of a host” and other recited elements in the claim have been omitted, such omission

amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

MPEP 2172.01 requires that relationships between elements recited in the claims must be specified. Specifically, MPEP 2172.02 requires interrelation and structural relationships between essential elements in the claims. Therefore, it is the Examiner's position that the claimed elements, as defined in the originally filed specification and as identified above, are essential elements to the claimed invention. Since they are essential elements as defined in the originally filed specification, their structural cooperative relationships must be provided in the claims. Further, it is also the Examiner's position that the claimed elements, as identified above, function simultaneously, are directly functionally related, directly inter-cooperate, and/or serve independent purposes, as evidenced from the originally filed specification.

If Applicants disagree with the Examiner that the above identified elements, as defined by the originally filed specification, are essential elements to the claimed invention, and that the above identified elements are directly functionally related, directly inter-cooperate, and/or serve independent purposes, it is requested that Applicants provide evidences showing that the identified elements are not essential elements to the claimed invention, do not function simultaneously, are not directly functionally related, do not directly inter-cooperate, and/or do not serve independent purposes; and state on the record that this is the case.

In claim 7, the language "the device is arranged for causing at least one signal line of the bus coupled to the host module to be forced tri-state in response to the

detecting the presence of the host externally connected to the bus" cannot be ascertained in view of the specification ([0028]).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 7-10, 14, and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Oguma (6516205, cited by Applicants).

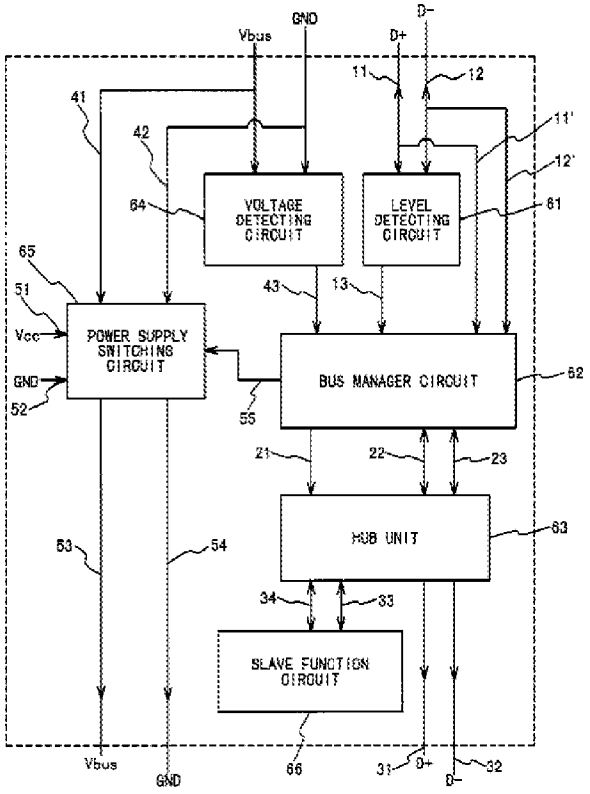
As broadly drafted, claims 1-11 an 14-19 do not define any structure/step that differs from Oguma.

The rejection outlined in a previous Office Action is reproduced below. New limitations added to the claims by the 4/24/2008 amendment, is fully addressed below under "Response to Argument."

With regard to claim 1, Oguma discloses a device operable as a host device (as shown generally in Fig. 3, which is reproduced below for ease of convenience and

reference, the portable device comprises a bus manager circuit can be operable as a host device)

Fig. 3



comprising: a port connected to a bus (as shown in Fig. 3, USB port of the portable device provides connection to the USB bus comprising Vbus, GND), means for detecting the presence of another host connected to the bus and for relinquishing host status in response thereto (the voltage detecting circuit 64 is readable as the so-called “means for detecting.” When the detecting circuit 64 detects presence of another host 1 connected to the USB bus, the host status of the portable device is

relinquished. See at least column 2, lines 39-57, column 4, line 65 to column 6, line 17).

With regard to claim 2, the host provides power supply for providing a supply voltage on a voltage supply line (Vbus GND) of the bus.

With regard to claim 4, it is clear from discussion above that the voltage detecting circuit detects a change in voltage on a voltage supply line of the bus, thereby detecting the presence of the other host. See at least column 2, lines 39-57, column 4, line 65 to column 6, line 17).

With regard to claim 5, it is clear from discussion above that the change is an increase.

With regard to claim 7, as best the Examiner can ascertain from the language of the claim, in Oguma, the portable device is arranged for causing at least some lines Vbus GND, D lines of the port to be forced tri-state such as suspended, active, and unavailable states, on detecting the presence of another host.

With regard to claim 8, according to USB standard, upon discover a connected host, a reset signal is sent to a USB slave.

With regard to claim 9, see discussion above and at least column 2, lines 39-57, column 4, line 65 to column 6, line 17.

With regard to claim 10, see discussion above regarding claims 1 and 6 and at least column 2, lines 39-57, column 4, line 65 to column 6, line 17.

With regard to claim 14, see discussion above regarding claim 1.

With regard to claim 17, see discussion above.

With regard to claim 18, it is clear that a USB slave can be connected to the portable device. See at least Fig. 1.

With regard to claims 19-22, see discussion above regarding claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma.

As discussed above, Oguma discloses the claimed invention except for the inclusion of the bus manager circuit responsible for providing a host status to the portable device, to a battery pack for providing power supply to the portable device 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the bus manager responsible for priding the host status to the portable device, to the battery pack of the portable device, since the battery pack is always an integral part of the portable device as evidenced by at least Chandley (7,349,689), and further moving the manager circuit to the battery pack only involves ordinary skill in the art.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma.

As discussed above, Oguma discloses the claimed invention including the use of a portable device such as a portable phone.

However, Oguma does not disclose that the portable device is capable of receiving video broadcast.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the portable device with capability of receiving video broadcast, since providing a portable device such as a portable or mobile phone with a capability of receiving video broadcast is old and well-known and only involves ordinary skill in the art as evidenced by at least Chandley (7,349,689). As a matter of fact, every smart phone is able to connect to the internet for downloading audio and video contents.

Response to Arguments

Applicants' arguments filed 12/03/2008 have been fully considered but they are not persuasive.

At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997)*. As a matter of fact, the "examiner has the duty of police claim language by giving it the broadest reasonable interpretation." *Springs Window Fashions LP v. Novo Industries, L.P.,* 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986). With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claim language will not be warranted.

The 112 Rejection:

Applicants' amendment to claim 21 still does not provide any connection between the "means for detecting" and other recited elements in claim 21.

The 102 Rejection:

With regard to claims 1, 2, 4, 5, 7-10, 14, and 17-21, Applicants have argued that "Claims 1, 2, 4, 5, 7-10, 14, and 17-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent no. 6,516,205 to Oguma ("Oguma"). This rejection is traversed. Amended independent claim 1 recites, among other features, 'wherein the bus passes a signal directly from the first port to the second port responsive to the relinquishment of host status.' The amended features recited in claim 1 are supported by the specification when read as a whole, and in particular, by paragraphs [0028] and [0031] and Figures 1 and 3. Oguma at col. 3, line 48 - col. 4, line 62 and Figure 3 describe an automatic switching mechanism incorporated in a portable phone as a mobile terminal. Oguma fails to disclose the above-noted features of amended claim 1, with respect to the automatic switching mechanism described in Oguma, for reasons substantially similar to those discussed at pages 6-8 of Applicant's Amendment dated April 24, 2008. In short, even if the upstream port (e.g., D+ 11, D- 12, Vbus 41, and GND 42) of Oguma could appropriately be analogized to the recited first port, and the downstream port (e.g., D+ 31, D- 32, Vbus 53, and GND 54) of Oguma could appropriately be analogized to the recited second port, Oguma fails to disclose features related to a bus passing a signal directly from the upstream port to the downstream port as recited in claim 1. Instead, Oguma imposes intervening components and circuits (which include bus manager circuit 62, hub unit 63, and power supply switching circuit 65) to perform any sort of pass- through function. Indeed, Oguma at col. 4, lines 18-22 describes that when host personal computer 1 operates

as a bus manager, bus manager circuit 62 stops or invalidates a bus manager function and pass through the signal between host personal computer 1 and bus peripheral units. Thus, Oguma fails to disclose all of the features of claim 1, and claim 1 is allowable for at least these reasons."

In response to Applicants' argument, at the outset, Applicants' Fig. 3 is reproduced below for comparison.

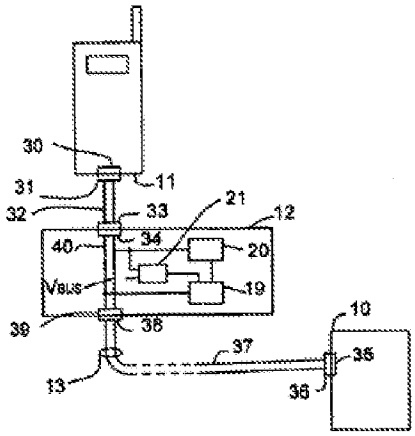


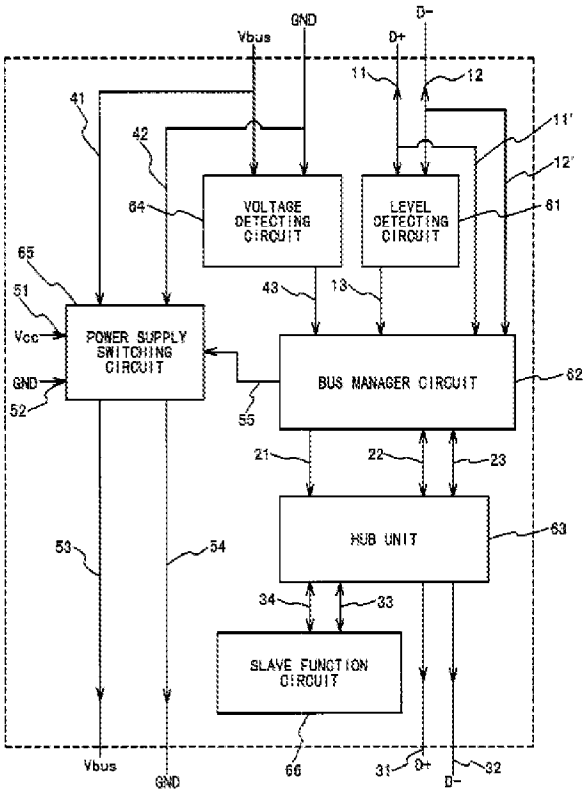
Figure 3

As shown in Applicants' Fig. 3, element 12 is the so-called "device operable as a host device," element 33 is the "first port," element 38 is the "second port," element 19 is the "host module," element 20 is a "comparator," and element 10 is the so-called "host externally connected to the bus."

Thus, contrary to Applicants' argument, Fig. 3 of Oguma, which is reproduced below for ease of reference and comparison, shows the so-called "device operable as a

host." Further as shown in Fig. 3, the device includes a USB bus comprising Vbus, GND, D+, and D-. The device further comprises a first upstream port connected ditectly to the USB bus; and a second downstream port connected directly to the same USB bus running from the first upstream USB port to the second downstream USB port. The device as shown in Fig. 3 of Oguma also shows the so-called "host module" or bus manager circuit 62 connected directly to the same USB bus; and the "comparator" or voltage circuit 64 detecting coupled to the same USB bus to detect the presence of a host externally connected to the USB bus. A voltage detecting circuit basically comprises a voltage comparator for comprising a supply voltage with a reference voltage (VREF) to detect a change in voltage or a difference between supply voltage and reference voltage. Further, as noted above, a USB bus comprises Vbus, GND, D+, and D-. It is also important to note that Applicants' Fig. 3 shows a Vbus line, and other lines are grouped together as line 40.

Fig. 3



Further, Applicants have argued that "Oguma imposes intervening components and circuits (which include bus manager circuit 62, hub unit 63, and power supply switching circuit 65) to perform any sort of pass- through function." In response to Applicants' argument, at the outset, it is noted that Applicants have acknowledged that the signal is indeed passed through from host to device without any modification to the signal. As a matter of fact, Oguma clearly discloses that the bus manager circuit 62 only passes the USB signals. Thus, USB data are communicated between the slave function circuit 66, the host personal computer 1, and the third external device 6 via the USB hub unit 63. The USB hub, by definition, is essential transparent. What is sent by the host is received by the device. See definition of USB Hub provided by Wikipedia, cited below.

Thus, it is clear that the bus manager circuit 62 as well as the hub 63 allow the USB data to pass through directly from the host to the device without any USB signal intervention and/or modification. In other words, the USB data bus passes the USB signal directly from the first port to the second port (the ports are used to connect the host to the device) in response to the relinquishment of host status.

With regard to new claim 22, Applicants have argued that "Claim 22 has been added in the present paper, and is supported by the specification when read as a whole, and in particular, by paragraphs [0028] and [0031] and Figures 1 and 3. Claim 22 depends from claim 1. Claim 22 recites 'wherein the bus includes a signal line, and wherein the signal line passes the signal directly from the first port to the second port responsive to the relinquishment of host status.' Oguma fails to disclose these features. As discussed above with respect to claim 1, Oguma at Figure 3 places intervening components/circuits between the upstream port and the downstream port. As such, Oguma fails to disclose a device operable as a host device, the device including a bus (as recited in claim 1), wherein the bus includes a signal line, and wherein the signal line passes the signal directly from the first port to the second port responsive to the relinquishment of host status as required by claim 22. As such, claim 22 is allowable over Oguma based on the lack of direct passing in Oguma."

Contrary to Applicants' argument, as already discussed above, Oguma clearly discloses that the bus manager circuit 62 only passes the USB signals. Thus, USB data are communicated between the slave function circuit 66, the host personal computer 1, and the third external device 6 via the USB hub unit 63. The USB hub, by definition, is

essential transparent. What is sent by the host is received by the device. See definition of USB Hub provided by Wikipedia, cited below. Thus, it is clear that the bus manager circuit 62 as well as the hub 63 allow the USB data to pass through directly from the host to the device without any USB signal intervention and/or modification. In other words, the USB data bus passes the USB signal directly from the first port to the second port (the ports are used to connect the host to the device) in response to the relinquishment of host status.

The 103 Rejection:

Applicants did not separately argue against the 103 Rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dang whose telephone number is 571-272-3626. The examiner can normally be reached on Monday-Friday from 9:AM to 5:PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Khanh Dang/

Primary Examiner, Art Unit 2111